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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,876	07/29/2003	William C. Stumphauzer	1-16068	5582
7590 05/01/2006			EXAMINER	
MARSHALL & MELHORN, LLC Attention: Donald A. Schurr 8th Floor Four SeaGate			SZEKELY, PETER A	
			ART UNIT	PAPER NUMBER
			1714	
Toledo, OH 4	3604		DATE MAILED: 05/01/2006	6

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)		
	10/629,876	STUMPHAUZER	STUMPHAUZER ET AL.	
Office Action Summary	Examiner	Art Unit	<u> </u>	
	Peter Szekely	1714		
The MAILING DATE of this communication ap Period for Reply	opears on the cover she	et with the correspondence a	ddress	
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING I - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the maili earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMM .136(a). In no event, however, n d will apply and will expire SIX (6 tte, cause the application to beco	UNICATION. nay a reply be timely filed) MONTHS from the mailing date of this ome ABANDONED (35 U.S.C. § 133).	·	
Status				
Responsive to communication(s) filed on 29. This action is FINAL . 2b) ☑ The 3) ☐ Since this application is in condition for allowed closed in accordance with the practice under	is action is non-final. ance except for formal	•	e merits is	
Disposition of Claims				
4) Claim(s) 1-46 is/are pending in the application 4a) Of the above claim(s) 29-33,36 and 40-43 5) Claim(s) is/are allowed. 6) Claim(s) 1-28,34,35,37-39 and 44-46 is/are reference of the second of the seco	is/are withdrawn from ejected.			
9)⊠ The specification is objected to by the Examin 10)☐ The drawing(s) filed on is/are: a)☐ ac Applicant may not request that any objection to the Replacement drawing sheet(s) including the corre 11)☐ The oath or declaration is objected to by the E	cepted or b) objecte e drawing(s) be held in ab ction is required if the dra	peyance. See 37 CFR 1.85(a). wing(s) is objected to. See 37 C		
Priority under 35 U.S.C. § 119				
12) Acknowledgment is made of a claim for foreig a) All b) Some * c) None of: 1. Certified copies of the priority documer 2. Certified copies of the priority documer 3. Copies of the certified copies of the pri application from the International Burea * See the attached detailed Office action for a list	nts have been received nts have been received ority documents have b au (PCT Rule 17.2(a)).	. in Application No been received in this Nationa	l Stage	
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 1/20/04.1/30/04.1/3/05	Pape	view Summary (PTO-413) r No(s)/Mail Date se of Informal Patent Application (PT	O-152)	

U.S. Patent and Trademark Office PTOL-326 (Rev. 7-05)

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DETAILED ACTION

Election/Restrictions

DETAILED ACTION

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-28, 34-35, 37-39 and 44-46, drawn to a composition, classified in class 524, subclass 270 and class 521, subclass 75.
 - II. Claims 29, 32, 33 and 36, drawn to a laminate, classified in class 428, subclass 355 EN.
 - III. Claims 30-31 and 40-43, drawn to a process of blending, classified in class 366, subclass 144.

The inventions are distinct, each from the other because of the following reasons:

- 2. Inventions I and II are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product, and the species are patentably distinct (MPEP § 806.05(j)). In the instant case, the intermediate product is deemed to be useful as an unsupported film and the inventions are deemed patentably distinct because there is nothing on this record to show them to be obvious variants.
- 3. Inventions III and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make another and materially different product or (2) that the product as claimed can be made by another and materially different process

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(MPEP § 806.05(f)). In the instant case the nanoparticles can be partially exfoliated before adding them to the liquid.

- 4. Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.
- 5. During a telephone conversation with Donald Schurr on 4/26/06 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-28, 34-35 and 37-39. Affirmation of this election must be made by applicant in replying to this Office action. Claims 29-33, 36 and 40-43 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.
- 6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Specification

7. The disclosure is objected to because of the following informalities: On page 7, lines17-18, PVB and PVF are identified as being copolymers of PVOH. This is incorrect.

Appropriate correction is required.

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Claim Objections

8. Claim 44 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form. The intended use does not further limit the composition.

Claim Rejections - 35 USC § 112

- 9. The following is a quotation of the first paragraph of 35 U.S.C. 112:
 - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 10. Claims 1-28, 37-39 and 44-46 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a hot melt adhesive, does not reasonably provide enablement for other kind of adhesives and dispersions. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the invention commensurate in scope with these claims. See page 2, lines 28-29.
- 11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.
- 12. Claims 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 13. The term "resistant" in claim 4 is a relative term, which renders the claim indefinite. The term "resistant" is not defined by the claim, the specification does not

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provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. How resistant is resistant?

Claim Rejections - 35 USC § 102

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 14. Claims 1-10, 12, 14-28, 34-35, 37-39 and 44-46 are rejected under 35 U.S.C. 102(b or e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Flanagan et al. 3,644,245,Yazaki et al. 4,548,985, Wang et al. 6,143,818, Peacock 5,574,084, Kolb et al. 6,586,483, Butterbach et al. 6,677,394 or Chheang et al. 2003/0100654.
- 15. Flanagan et al. disclose a hot melt adhesive (HMA) containing EVA, glycerol ester of hydrogenated rosin, mineral oil and paraffin in claim 5. The EVA contains 4-16 moles of ethylene per mole of vinyl acetate (claim 1). Yazaki et al. teach an HMA containing an anhydride-modified olefin mixed with an unmodified olefin and epoxidized oils in claim 1. The anhydride is maleic anhydride (claim 3). The modified olefin is a blend of EVA and polypropylene or polyethylene (claim 4). Epoxidized oils are listed in claim 6. The unmodified olefin is polyethylene or polypropylene (See the Examples). Wang et al. divulge an HMA containing ethylene-propylene copolymer, olefin polymer, tackifier, plasticizer, wax and stabilizer in claim 1, polyterpenes in claim 2, mineral oil in claim 3, EVA in claim 11 and polyolefin waxes in claim 12. Peacock reveals an HMA containing EVA, tackifier and modifier in claim 1, dicarboxylic acids, among them dodecanoic acid, as the modifiers in claim 8, terpenes and rosin esters in column 2,

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lines 22-37 and plasticizers in column 3, lines 35-38. Kolb et al. display a foam comprising a vehicle and surface-modified nanoparticles in claim 1, identifies the vehicle as a blend of EVA and ethylene-propylene copolymer in claim 21, a blend of polyvinyl butyral and EVA in claim 23, which vehicle is a hot melt adhesive (claim 42). The nanoparticles are modified by octanoic or dodecanoic acid (column 6, line 65-67). For water and organic liquids see column 8, lines 64-67, for plasticizers see column 10, line 34. Foaming agents are listed from column 11 line 60 to column 12, line 65. Butterbach et al. describe an HMA containing pentaerythritol ester of abietic acid (rosin), EVA, hindered phenol, polyethylene glycol and ethylene bis-stearamide in column 5, lines 1-10. Chheang et al. discuss an HMA containing polymer and not exfoliated organophilic clay in claim 1, exfoliated clay in claim 2, tackifier in claim 9, smectite in claim 10, blends of EAA or EVA with polyethylene or ethylene-propylene copolymers in paragraph 0031, reactive monomers, tackifiers and plasticizers in paragraph 0032, terpenes in paragraph 0046, particle sizes of the clay in paragraph 0071 and tackifiers and plasticizers again in paragraph 0073. Applicants' claims are not novel. In the alternative, it would have been obvious to one having ordinary skill in the art; at the time the invention was made, to select applicants' ingredients from a list of equivalents.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Szekely whose telephone number is (571) 272-1124. The examiner can normally be reached on 7:00 a.m.-5:30 p.m. Tuesday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Peter Szekely Primary Examiner Art Unit 1714

P.S. 4/27/06